

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Original): A wound dressing material for controlled activation of a wound healing therapeutic compound in the presence of a protease enzyme in a wound fluid, the material comprising:

- a medically acceptable polymer;
- a wound healing therapeutic agent;
- an inhibitor of the protease enzyme; and
- a linker group which is cleavable by the protease enzyme,

wherein the activities of both the wound healing therapeutic agent and the inhibitor are increased by contacting the wound dressing material with a wound fluid containing the protease enzyme.

Claim 2. (Original) A wound dressing material according to claim 1, wherein the wound healing therapeutic agent and the inhibitor are dispersed in a matrix of the medically acceptable polymer, and the polymer comprises the linker group.

Claim 3. (Original) A wound dressing material according to claim 2, wherein the polymer is cross-linked by the linker group.

Claim 4. (Currently amended) A wound dressing material according to ~~any preceding~~ claim 1, wherein the wound healing therapeutic agent and/or the inhibitor are conjugated to the medically acceptable polymer by the linker group.

Claim 5. (Currently amended) A wound dressing material according to ~~any preceding~~ claim 1, wherein the wound healing therapeutic agent is conjugated to the inhibitor by the linker group.

Claim 6. (Original) A wound dressing material according to claim 1 wherein elevated levels of the enzyme are associated with pain, wound infection or wound chronicity.

Claim 7. (Currently amended) A wound dressing material according to ~~any preceding~~ claim 1, wherein the enzyme is a protease, and the linker group comprises an oligopeptidic sequence which is a substrate for the protease.

Claim 8. (Original) A wound dressing material according to claim 7, wherein the protease is elastase and wherein the oligopeptidic sequence comprises or consists of lys-gly-ala-ala-ala-lys -Ala-Ala-Ala-, Ala-Ala-Pro-Val, Ala-Ala-Pro-Leu, Ala-Ala-Pro-Phe, Ala-Ala-Pro-Ala or Ala-Tyr-Leu-Val.

Claim 9. (Original) A wound dressing material according to claim 7, wherein the protease is a matrix metalloproteinase and wherein the oligopeptidic sequence comprises or consists of -Gly-Pro-Y-Gly-Pro-Z-, -Gly-Pro-Leu-Gly-Pro-Z-, -Gly-Pro-Ile-Gly-Pro-Z-, or -Ala-Pro-Gly-Leu-Z-, where Y and Z are amino acids.

Claim 10. (Original) A wound dressing material according to claim 7, wherein the protease is a collagenase and wherein the oligopeptidic sequence comprises or consists of -Pro-Leu-Gly-Pro-D-Arg-Z-, -ProLeu-Gly-Leu-Leu-Gly-Z-, -Pro-Gln-Gly-Ile-Ala-Gly-Trp-, -Pro-Leu-Gly-Cys (Me)-His-, -Pro- Leu-Gly-Leu-Trp-Ala-, -Pro-Leu-Ala-Leu-Trp-Ala-Arg-, or -Pro-Leu-Ala-Tyr-Trp-Ala-Arg-, where Z is an amino acid.

Claim 11. (Original) A wound dressing material according to claim 7, wherein the protease is a gelatinase and wherein the oligopeptidic sequence comprises or consists of -Pro-LeuGly-Met-Trp-Ser-Arg-.

Claim 12. (Original) A wound dressing material according to claim 7, wherein the protease is thrombin and wherein the oligopeptidic sequence comprises or consists of -Gly-Arg-Gly-Asp-, -Gly-Gly-Arg-, -Gly-Arg-Gly-Asp-Asn-Pro-, -Gly-Arg-Gly-Asp-Ser-, -Gly-Arg-Gly-Asp-Ser-Pro-Lys-, -Gly-Pro-Arg-, -Val-Pro-Arg-, or -Phe-Val-Arg-.

Claim 13. (Original) A wound dressing material according to claim 7, wherein the protease is stromelysin and wherein the oligopeptidic sequence comprises or consists of -Pro-TyrAla-Tyr-Trp-Met-Arg-.

Claim 14. (Currently amended) A wound dressing material according to ~~any one of the preceding claims~~ claim 7, wherein the therapeutic agent is a reactive oxygen scavenger, an antimicrobial agent, a pain relieving agent, an antiseptic, an analgesic, or a local anaesthetic.

Claim 15. (Original) A wound dressing material according to claim 15, wherein the therapeutic agent comprises a reactive oxygen scavenger selected from the group consisting of antioxidant phenol derivatives, vitamin E, methyl peroxide antioxidants, stilbenes, gallic catechins, ubiquinol, retinoids, vitamin A, vitamin C, N-acetyl cysteine, selenium and its compounds, zinc and its compounds, glutathione, carotenoids, papai, thioproline, albumin, chlorophyllin, antioxidant dyestuffs, and mixtures thereof.

Claim 16. (Currently amended) A wound dressing material according to ~~any preceding claim~~ claim 15, wherein the enzyme inhibitor is selected from the group consisting of Tissue Inhibitor of Metalloproteinase (TIMP), 4-(2-aminoethyl)benzenesulfonyl fluoride AEBSF, antithrombin, (p-Amidinophenyl)methanesulfonyl fluoride APMSF, Aprotinin, diisopropylfluorophosphate DFP, phenyl methyl sulfonyl fluoride PMSF, Antipain, Chymostatin, Leupeptin, Tosyl-lysine chloromethylketone TLCK, Tosyl-phenyl chloromethylketone TPCK, L-trans-epoxysuccinylleucylamido (4-guanidino) butane E-64, Amastatin, Bestatin, Diprotin, Ethylenediamine tetra-acetic acid (EDTA), pepstatin and mixtures thereof.

Claim 17. (Currently amended) A wound dressing comprising a wound dressing material according to ~~any preceding claim~~ ____.

Claim 18. (Cancelled)